

B12-2527

REMARKS

Claims 101-200 are pending in the present Application. No claims have been added, amended or canceled, leaving Claims 101 – 120, 122 – 176 and 178 - 200 for consideration upon entry of the present Amendment. No new matter has been introduced by these amendments or new claims. Reconsideration and allowance of the claims are respectfully requested in view of the above amendments and the following remarks.

Applicants would also like to thank the Examiner for the interview granted on May 10th, 2006. During this interview the Examiner had requested an explanation for why a composition comprising 0.005 to 4 wt% thermoplastic polymer would behave differently from one containing 10 to 30 wt% thermoplastic polymer. This explanation is detailed below.

Information Disclosure Statement

Applicants note that the Examiner has not considered the art submitted in the Information Disclosure Statement on May 24, 2005. Applicants respectfully request that the art submitted in this Information Disclosure Statement be considered and a fully initialed PTO Form A820 be returned to the Applicants.

Claim Rejections Under 35 U.S.C. § 102(e)

Claims 101-200 are rejected under 35 U.S.C. § 102(e), as being anticipated by U.S. Patent No. 6,632,527 to McDaniel et al. (hereinafter McDaniel '527) and U.S. Patent No. 6,406,789 to McDaniel et al. (hereinafter McDaniel '789). (Office action dated 10-05-2005, page 2) Applicants respectfully traverse this rejection.

To anticipate a claim, a reference must disclose each and every element of the claim. *Lewmar Marine v. Varient Inc.*, 3 U.S.P.Q.2d 1766 (Fed. Cir. 1987).

The claimed invention as presently amended is directed to a particle comprising a particulate substrate; and a thermoplastic polymer present on or in the substrate in an amount sufficient to improve the dust suppression of the particle above that which would occur if the thermoplastic polymer was absent; wherein the particle comprises 0.005 to 4.0 weight percent of the thermoplastic polymer, based upon weight of the particle. (Claim 101)

B12-2527

All the other independent claims, i.e., Claims 135, 152, 155, 157, 160, 161, 187 and 188 as presently amended contain the limitation "wherein the particle comprises 0.005 to 4.0 weight percent of the thermoplastic polymer, based upon weight of the particle.

McDaniel '527 is directed to composite particles made of a binder and filler material. (see Abstract) McDaniel discloses that the binder may be an organic or an inorganic material. (Col. 5, lines 54 – 57) McDaniel '527 teaches that the binder is present in an amount of 10 to 30 wt% of the total dry materials used in the composite particle. (Col. 16, lines 6 – 9)

McDaniel '789 is directed to composite particles made of a resin and a filler material. (see Abstract) McDaniel '789 also discloses that the binder may be an organic or an inorganic material. (Col. 5, lines 24 – 27). Like McDaniel '527, McDaniel '789 also teaches that the binder is present in an amount of 10 to 30 wt% of the total dry materials used in the composite particle. (Col. 13, lines 56 – 58)

The claimed invention, in contrast to McDaniel '527 or McDaniel '789, is directed to a particle that comprises a thermoplastic polymer in an amount effective to provide dust suppression. This amount is between 0.005 and 4 weight percent, based on the weight of the particle. As can be seen from at least Example 3 of the present application (see Table 6), dust suppression is effectively attained in a Ball Mill Test when the thermoplastic polymer is added in amounts of less than 4 wt% of the total weight of the particle. For example, Figure 5 of the present application demonstrates that dust suppression can be effectively attained when the thermoplastic resin is added to the particle in amounts of less than 2.5 wt%. Using thermoplastic resin in an amount of less than or equal to about 4 wt% to achieve dust suppression is neither taught nor disclosed by McDaniel '527 nor McDaniel '789. As noted above, both McDaniel '527 nor McDaniel '789 teach that the binder must be present in amounts of 10 to 30 wt%. For this reason at least, neither McDaniel '527 nor McDaniel '789 can anticipate the claimed invention. Applicants therefore respectfully request a withdrawal of the § 102(e) rejection over McDaniel '527 and McDaniel '789 and an allowance of all the claims.

In addition, in response to the Examiner's request for an explanation for the differences between a proppant that comprises 0.005 to 4 wt% of a thermoplastic polymer versus one that comprises 10 to 30 wt% of the thermoplastic polymer, it should be noted that the proppant that comprises 0.005 to 4 wt% of the thermoplastic polymer generally tends to flow better during

B12-2527

production and storage than the proppant that comprises 10 to 30 wt% of the thermoplastic polymer.

This is documented in the specification at least in paragraphs [0030] and [0031] on page 9. Here the specification states that by using a thermoplastic elastomer in the amounts specified, the proppant particles are lubricated but yet avoid agglomeration. This reduction in agglomeration results in reduced power utilization during proppant manufacturing as well as in increased yields of 2 to 5% in the amount of proppant produced during the manufacturing process.

Thus by using the claimed amount of 0.005 to 4 wt% thermoplastic polymer in a proppant, not only is the production of dust is suppressed, but there is also improved productivity during manufacturing because of reduced agglomeration.

Applicants once again respectfully request withdrawal of the anticipation rejection and an allowance of the claims.

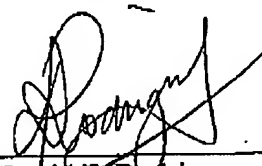
B12-2527

It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and withdrawal of the rejection(s) and allowance of the case are respectfully requested.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130.

Respectfully submitted,

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